ABSTRACT

Sub A1 — The major components are a primary winding 12 connected to a high-voltage, a large-current power supply 1, a secondary winding 14 connected to an electromagnetic forming coil 2, and a magnetic core 16 for guiding the magnetic flux produced by the primary winding. The magnetic core 16 is composed of a primary core 16a on which the primary winding is wound and a secondary core 16b on which the secondary winding is wound. The primary core and the secondary core are magnetically connected together by putting them in contact or in close proximity. And the primary core and the secondary core are separeated each other when the connector is disconnected. Thus, current pulses at a high voltage (for instance, 10 kV) with a large current (for example, 100 kA or more) and a narrow pulse width (e.g., 30 μsec or less) can be efficiently transmitted, and the connector can be easily attached and removed.